U.S. Patent Application No: 10/010,426 Applicant: Lewis et al. Title: Methods and Systems for Developing Tata Tragrams Docket No: 30014200-1006

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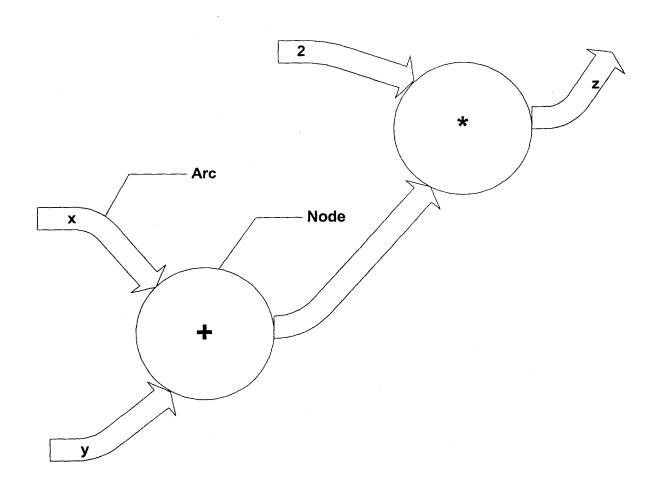
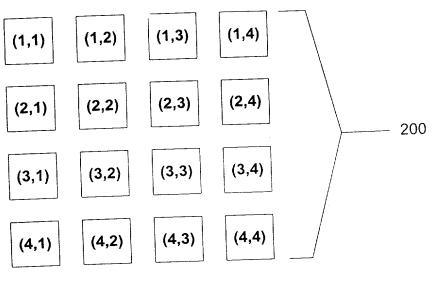


FIG. 1

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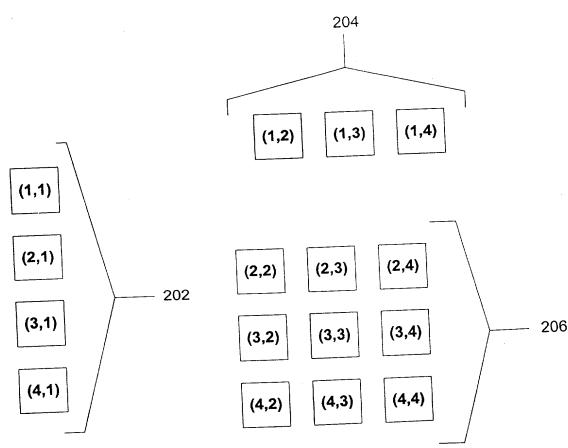
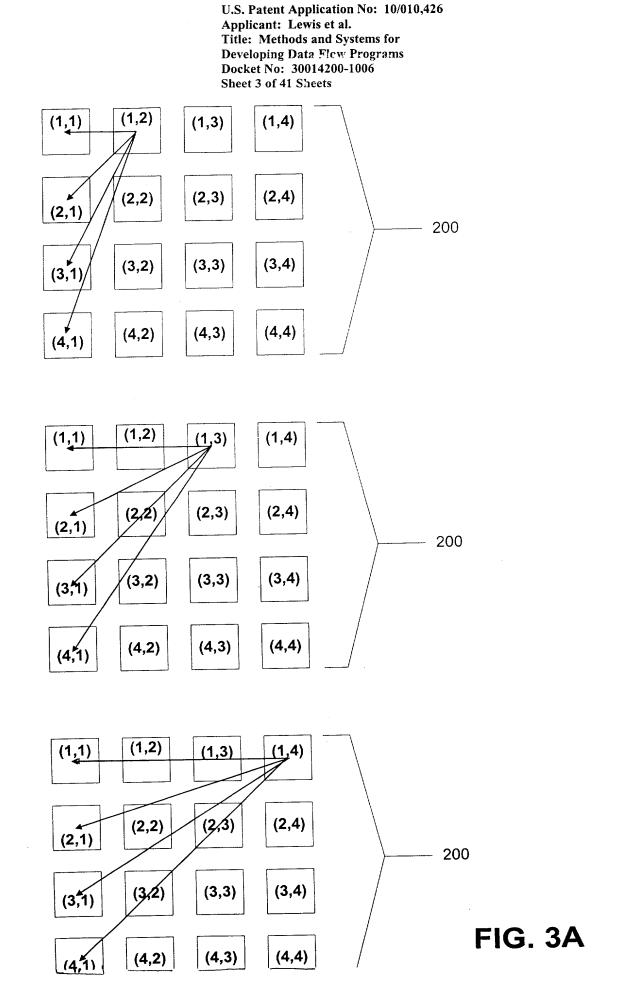


FIG 2



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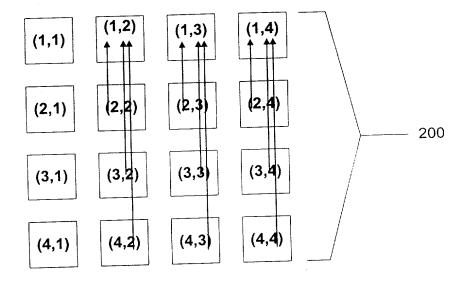


FIG. 3B

Applicant: Lewis et al. Title: Methods and Systems for Developing Data Flow Programs Docket No: 30014200-1006 Sheet 5 of 41 Sheets Blocks sharing Blocks sharing Blocks sharing same (first) state same (second) state same (third) state (2,2)(1,2)(1,1)(3,2)(1,3)(4,2)(2,1) (2,3)(1,4) (3,1)(3,3)(4,1)(3,4) (4,4)

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FIG. 4

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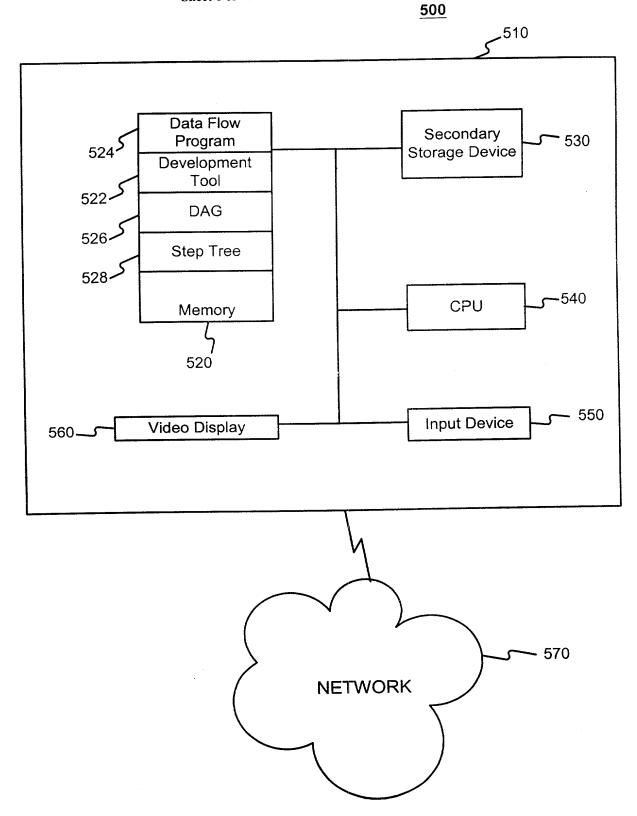


FIG. 5

Title: Methods and Systems for **Developing Data Flow Programs** Docket No: 30014200-1006 Sheet 7 of 41 Sheets Begin 600 610 Define Memory Region 620 Divide Memory Region Into **Blocks** 630 Ν Any More Blocks? Υ -670 Establish Dependency Links 640 Between Blocks Select Block 675 650 Identify Other Block(s) that Produce source code for Influence the Block's Final generating a DAG of nodes State and dependencies at run-time. 660 -680 Identify the Portion of the During run-time, Put All Control Flow Program Used to Nodes in Queue for Operate on the Block Execution

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FIG. 6

End

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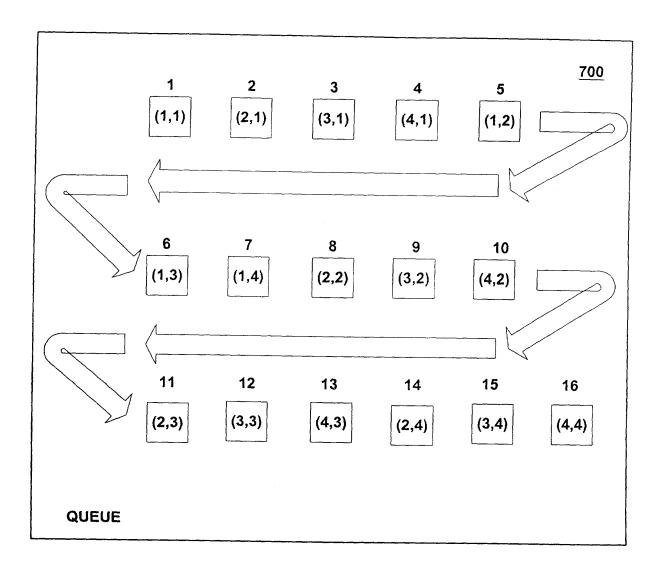


FIG. 7

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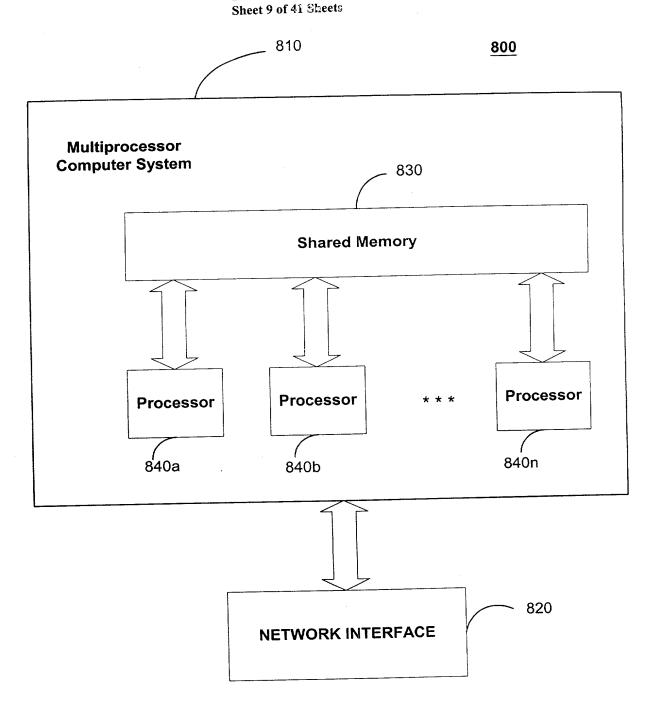
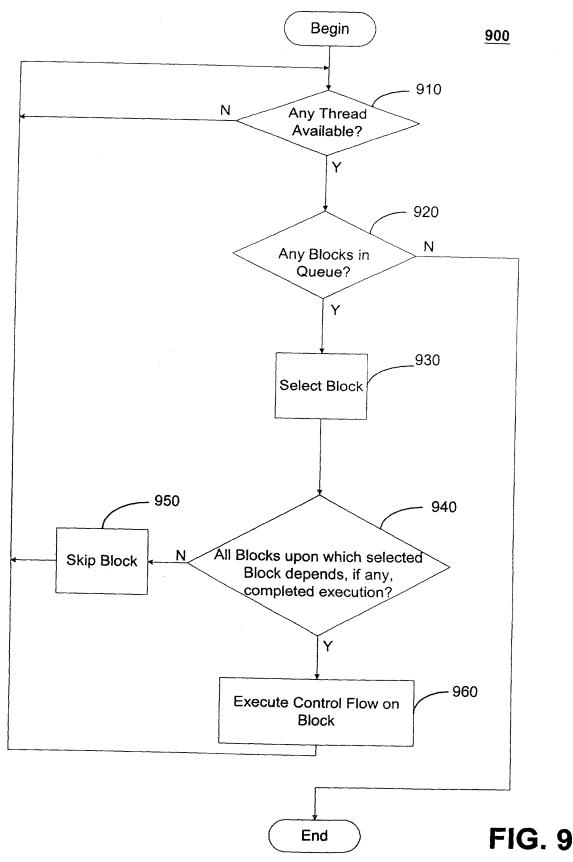


FIG. 8

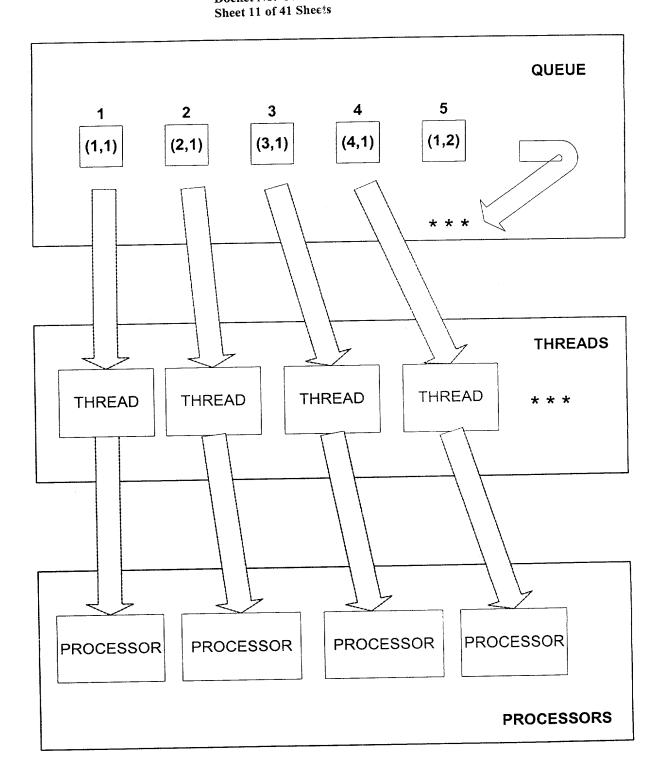
Applicant: Lewis et al.

Title: Methods and Systems for Developing Data Plany Programs Docket No: 30314236-1996

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**FIG. 10A** 

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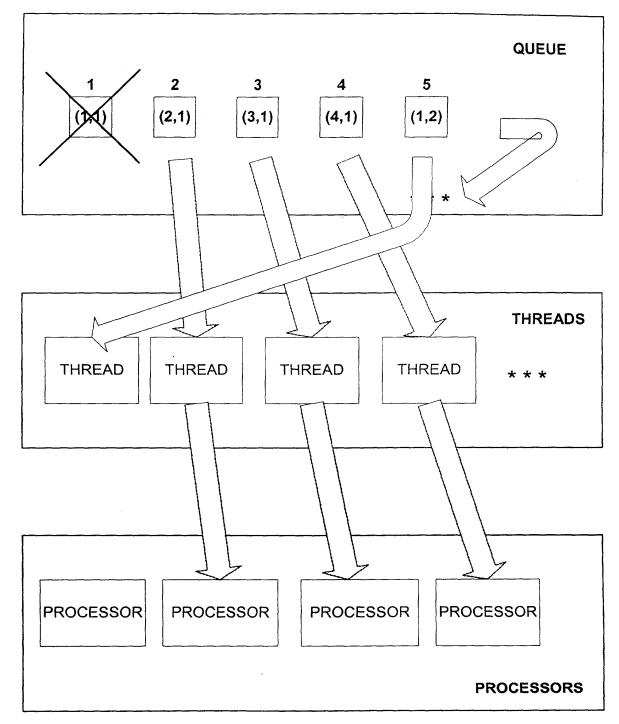


FIG. 10B

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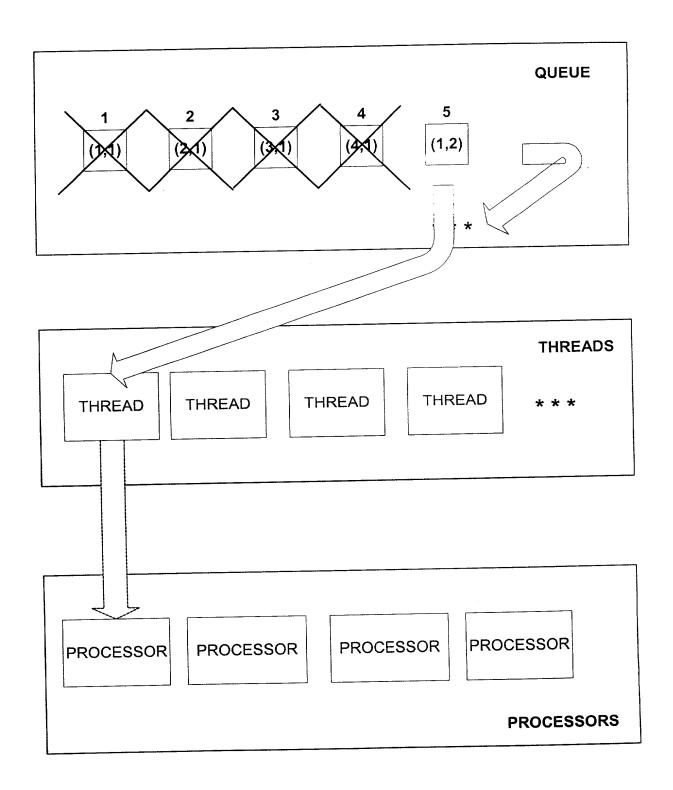


FIG. 10C

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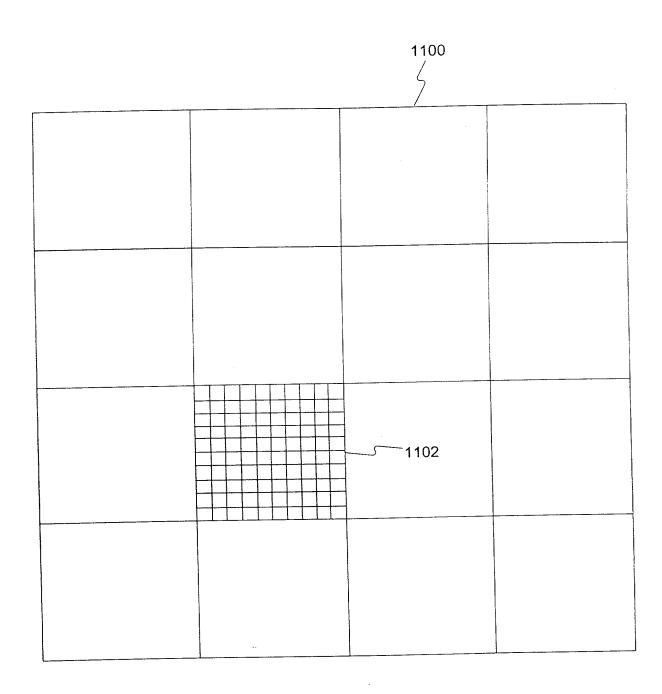
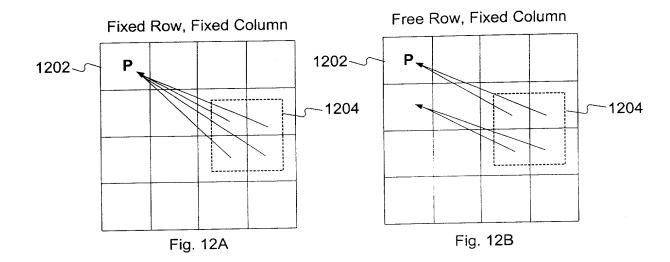
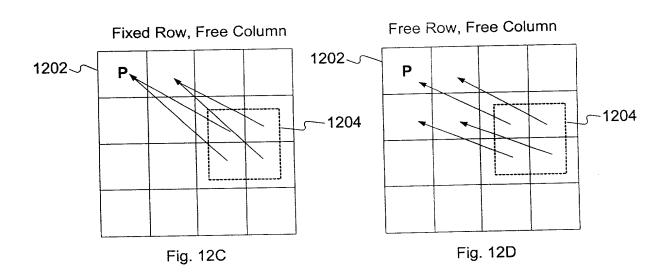


FIG. 11

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Developing Data Tlow Programs Docket No: 30014200-1006

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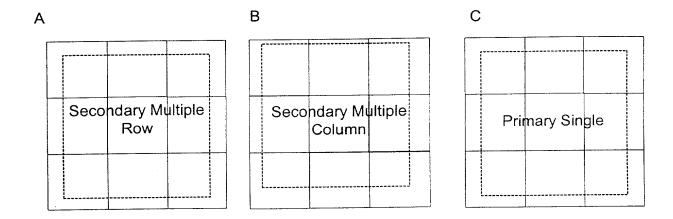


FIG. 13

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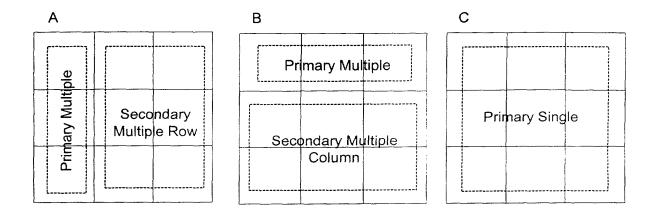
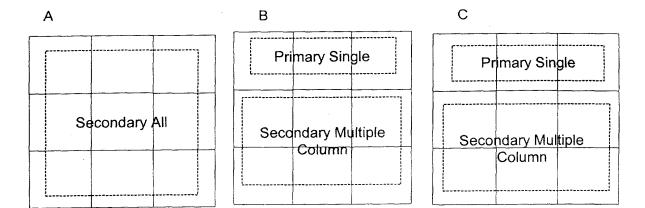


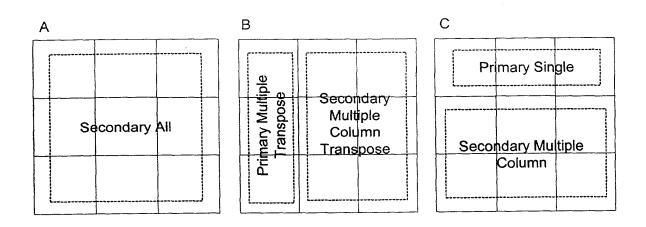
FIG. 14

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**FIG. 15A** 



**FIG. 15B** 

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**Developing Data Flow Programs** Docket No: 30014200-1006

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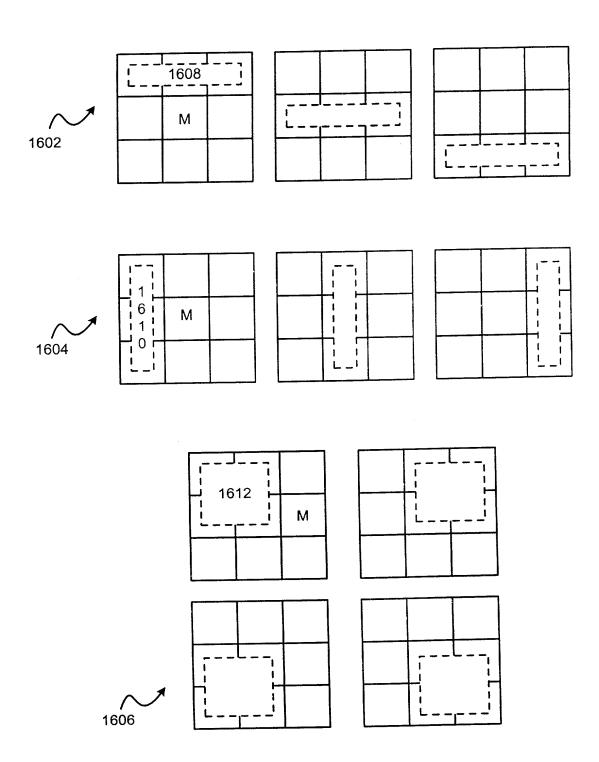
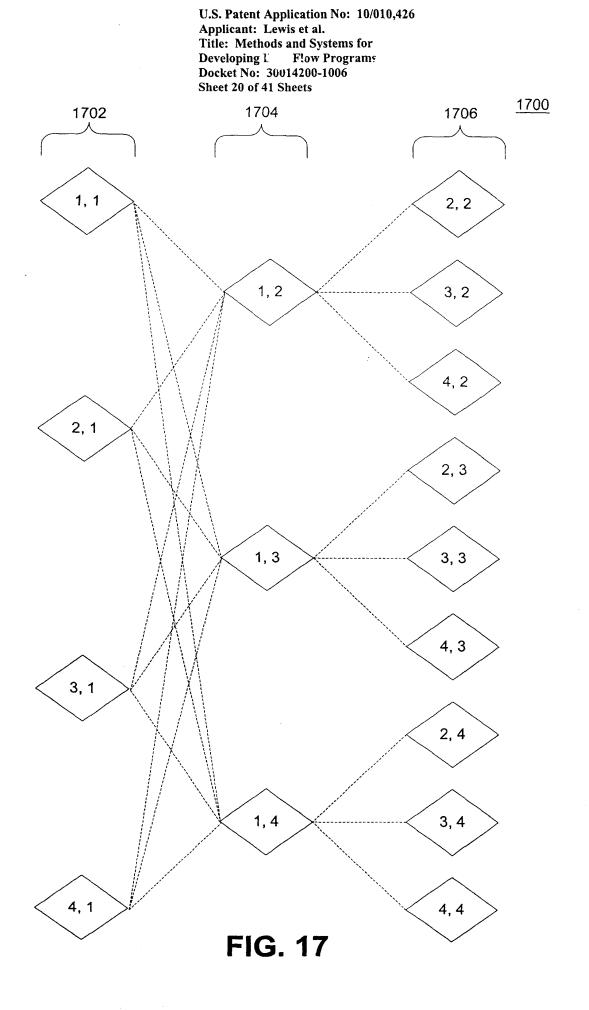
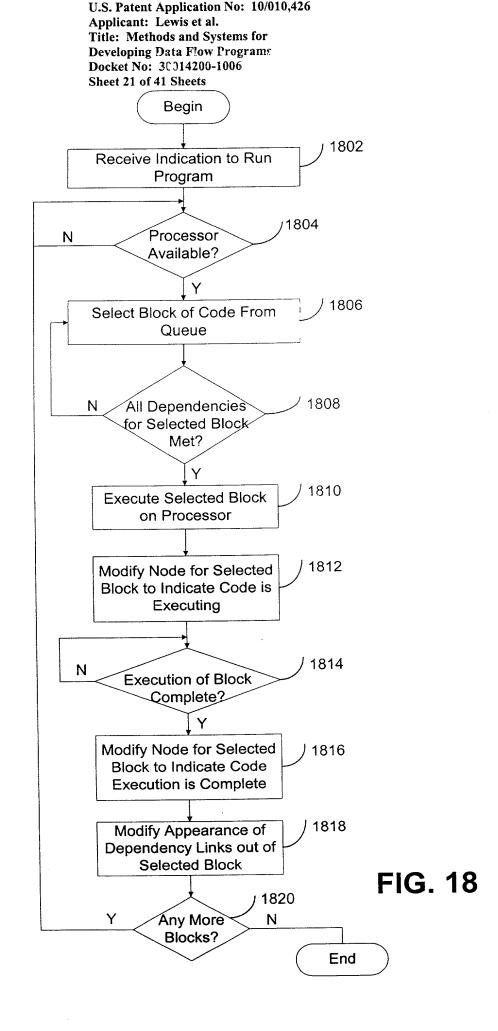


FIG. 16





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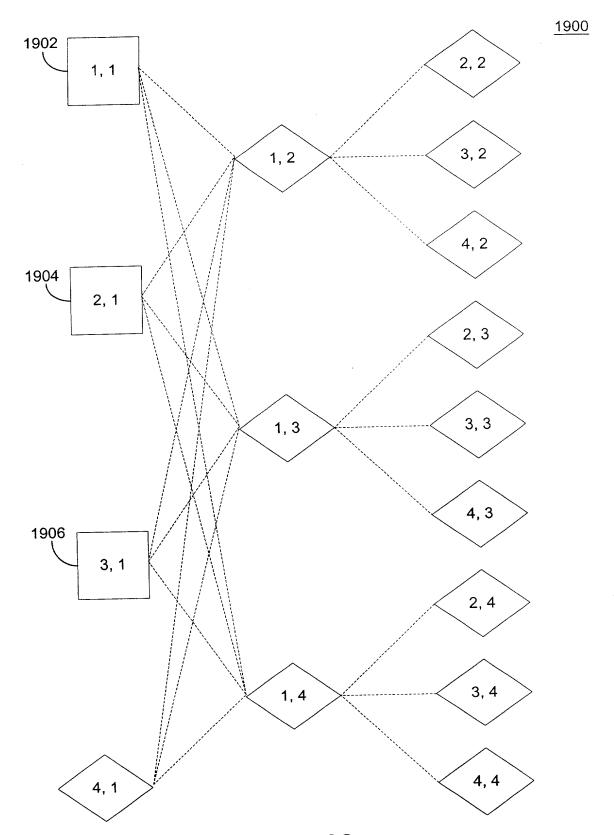


FIG. 19

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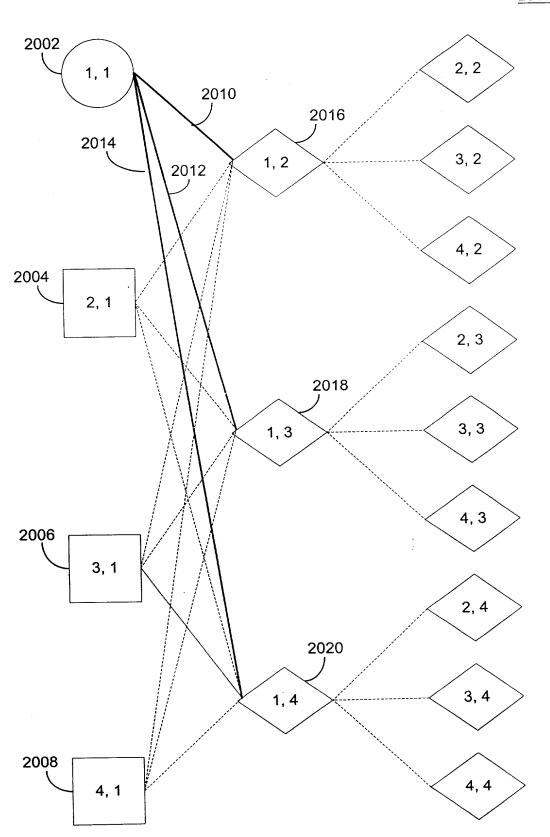


FIG. 20

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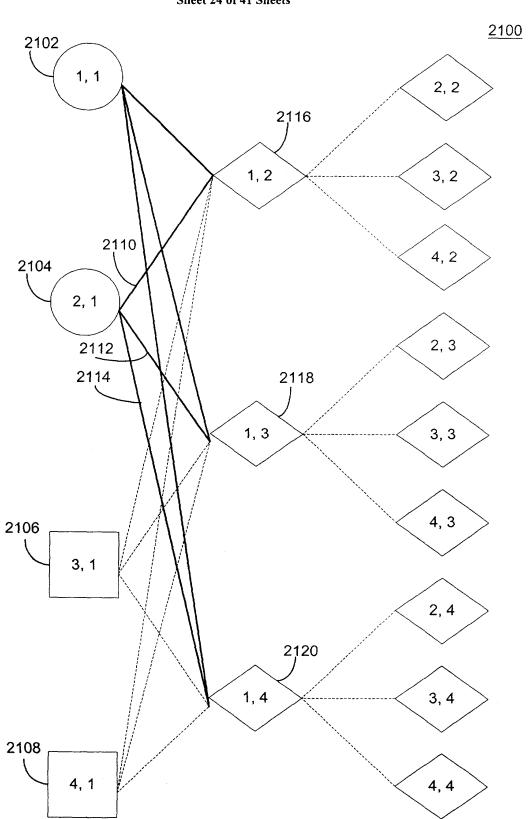
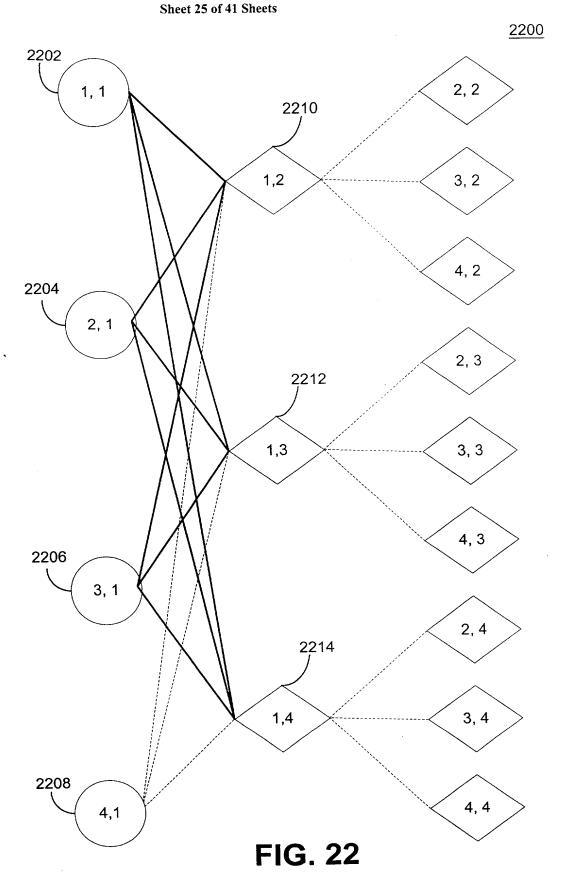


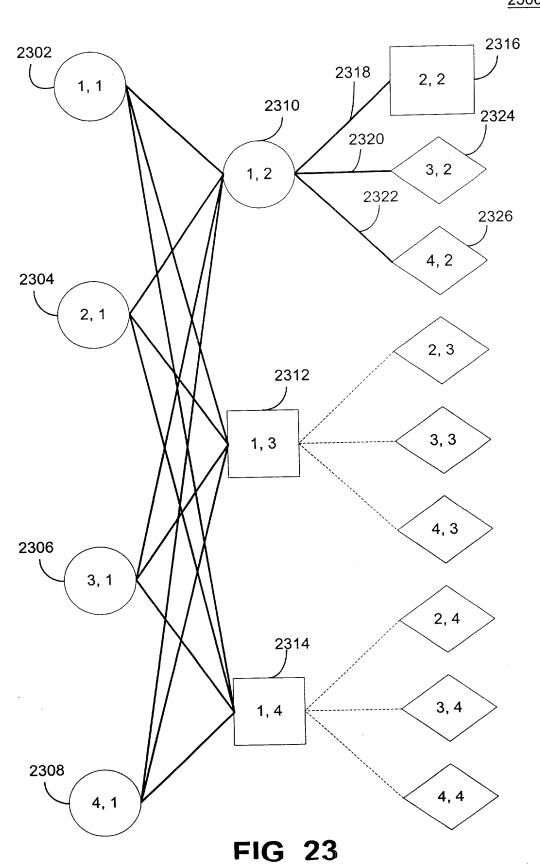
FIG. 21

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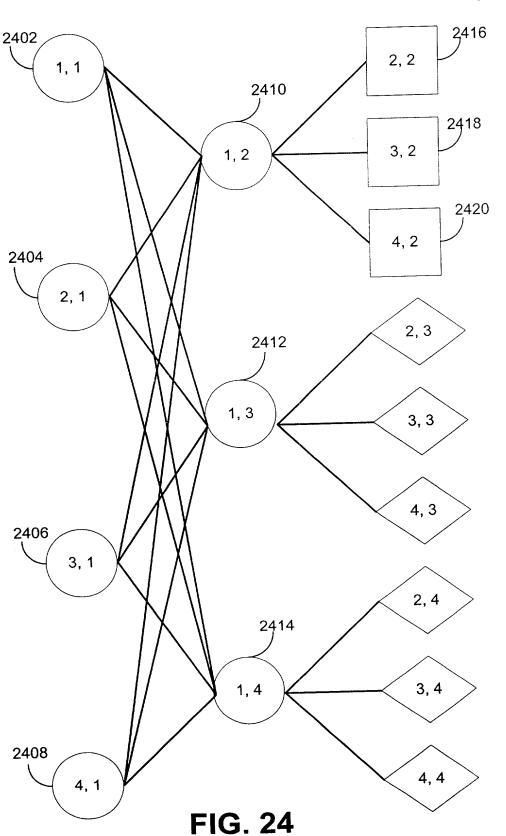
2300



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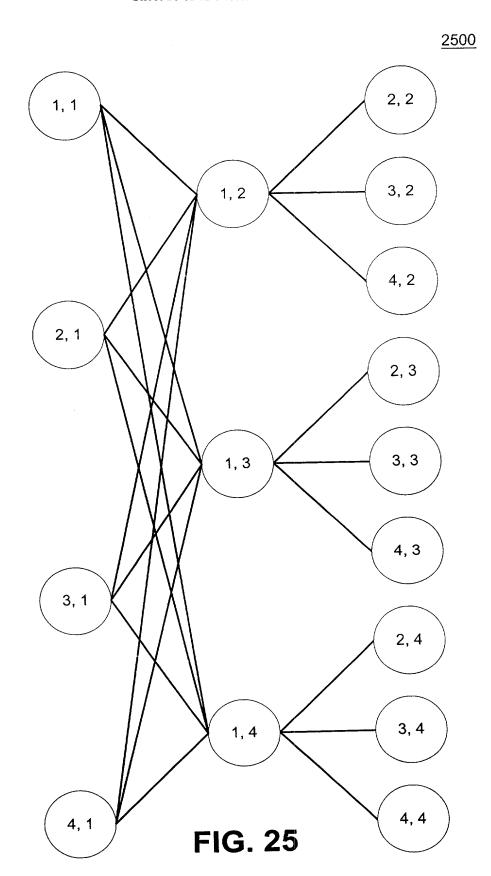
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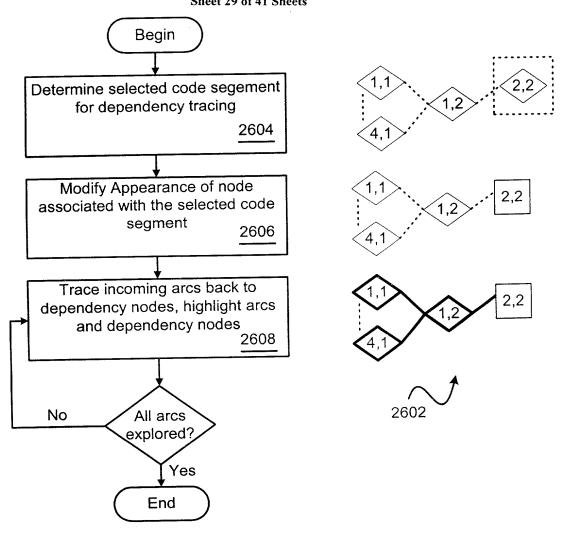
U.S. Patent Application No: 10/010,426 Applicant: Lewis et al. Title: Methods and Systems for Developing Data Flow Programs Docket No: 30014200-1006

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Figure 26

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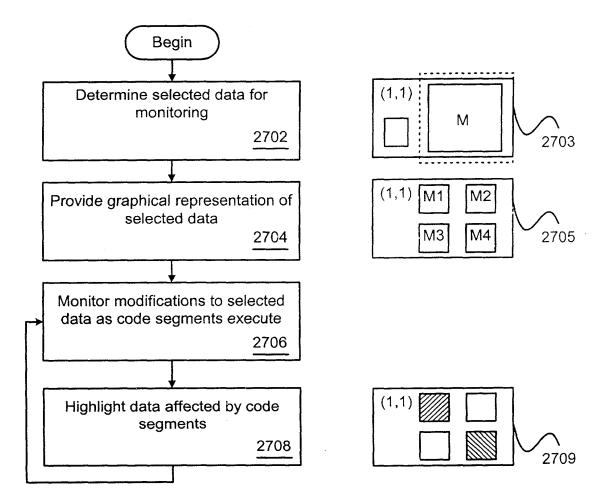
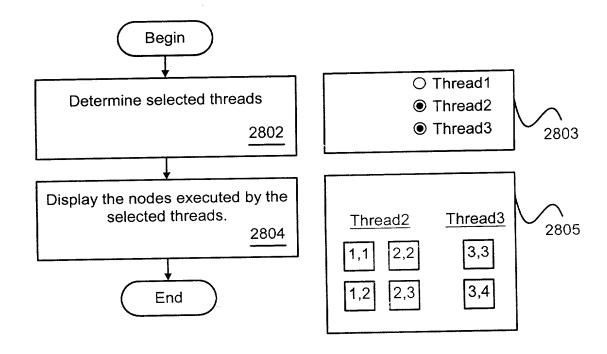




Figure 27

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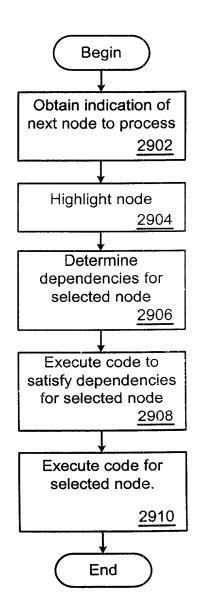
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2800 Figure 28

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2900

Figure 29

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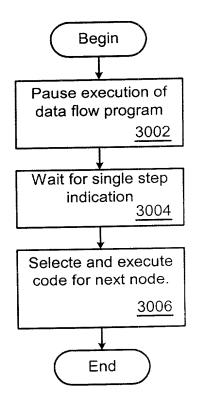


Figure 30

3000

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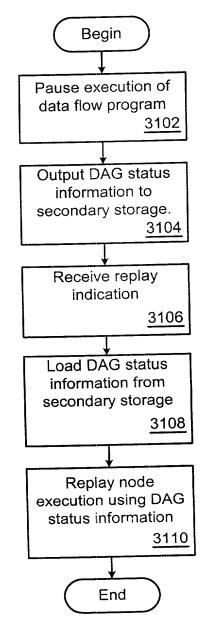
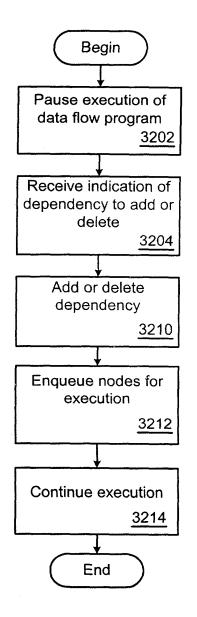


Figure 31

3100

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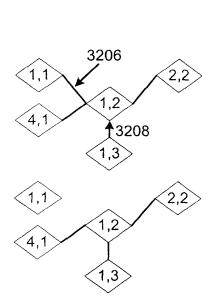




Figure 32

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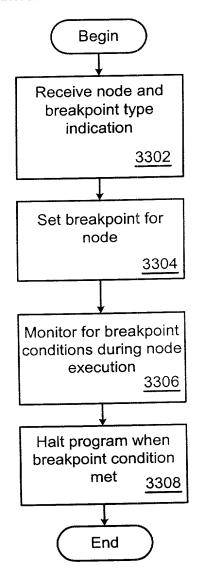


Figure 33

3300

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Figure 34

3400

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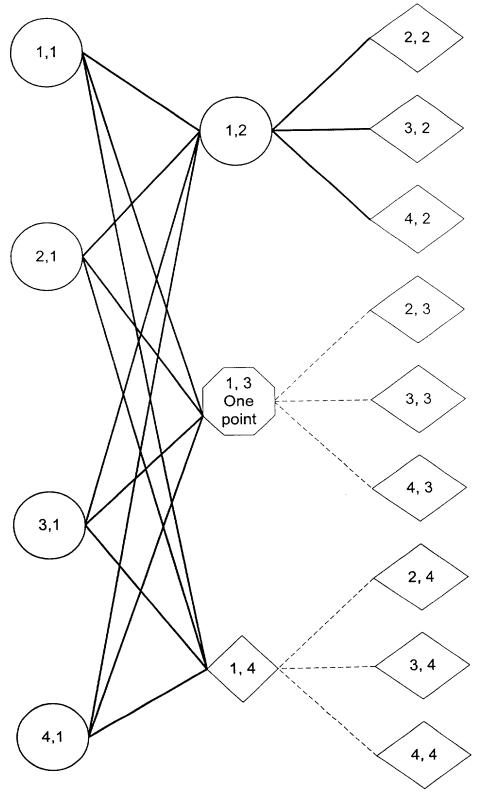


Figure 35

Applicant: Lewis et al.

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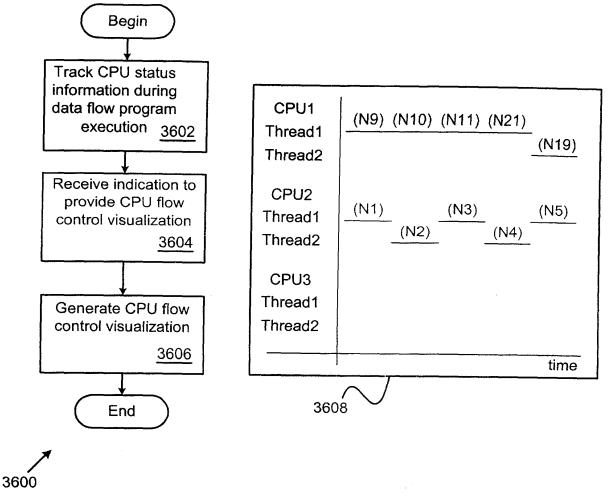


Figure 36

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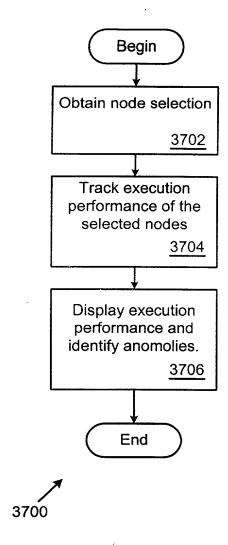


Figure 37

U.S. Patent Application No: 10/010,426 Applicant: Lewis et al. Title: Methods and Systems for Developir > Data Flow Programs Docket No: 30014200-1006 Sheet 41 of 41 Sheets Begin Obtain node selection 3802 Accept a modification or specification for node execution time 3804 Obtain node selection 3806 Accept a modification or specification for node execution time 3808

